What is Claimed is:

1   1.   A method of representing an entity as a document using a data source

2   having an associated property and content information related to the entity, the

3   method comprising:

4   identifying the data source as having the associated property;

5   retrieving the content information from the identified data source; and

6   providing the retrieved content information as at least a portion of the

7   document.

1   2.   The method of claim 1 wherein the entity is a task.

1   3.   The method of claim 1 wherein the entity is a person.

1   4.   The method of claim 1 wherein the entity is an object.

1   5.   The method of claim 1 wherein the entity is a device.

1   6.   The method of claim 1 wherein the data source is a document.

1   7.   The method of claim 1 wherein the data source is a device.

1   8.   The method of claim 7 wherein the device is a phone.

1   9.   The method of claim 7 wherein the device is a printer.

1   10.   The method of claim 7 wherein the device is a camera.

1   11.   A method of representing an entity as a document using a plurality of data
2   sources, a first one of the data sources having a first associated property and first
3   content information related to the entity, a second one of the data sources having
4   a second associated property and second content information related to the entity,
5   the method comprising:

6   identifying the first data source as having the first associated property;

7   identifying the second data source as having the second associated property;

8   retrieving the first content information from the first data source and the
9   second content information from the second data source; and

10   combining the retrieved first and second content information to define at
11   least a portion of the document.

1   12.   A document management system for representing an entity as a document
2   using a data source having an associated property and content information related
3   to the entity, the system comprising:

4   a bit provider configured to:

5   i)   identify the data source as having the associated property;

6   ii)   retrieve the content information from the identified data
7   source; and

8   iii)   provide the retrieved content information as at least a portion
9   of the document.

1   13.   A system for representing an entity as a document using a plurality of data

2   sources, a first one of the data sources having a first associated property and first

3   content information related to the entity, a second one of the data sources having

4   a second associated property and second content information related to the entity,

5   the system comprising:

6   a bit provider configured to:

7   i)   identify the first data source as having the first associated

8   property;

9   ii)   identify the second data source as having the second

10   associated property;

11   iii)   retrieve the first content information from the first data

12   source and the second content information from the second data source; and

13   iv)   combine the retrieved first and second content information

14   to define at least a portion of the document.

1   14.   The document management system of claim 13 further comprising:

2   an application interface in communication with the bit provider, the

3   application interface configured to provide the document to an application.

1   15.   A system for representing an entity as a document, the system comprising:

2   a data storage layer including a plurality of data sources, a first one of the

3   data sources having a first associated property and first content information related

4   to the entity, a second one of the data sources having a second associated property

5   and second content information related to the entity;

6   an application layer including a plurality of applications;

7   a document management layer interposed between the data storage layer and

8 the application layer, the document management layer including:

9   a)   a bit provider in communication with the data storage layer

10 and configured to:

11   i)   identify the first data source as having the first

12 associated property;

13   ii)   identify the second data source as having the second

14 associated property;

15   iii)   retrieve the first content information from the first

16 data source and the second content information from the second data source;

17   iv)   combine the retrieved first and second content

18 information to define at least a portion of the document; and

19   b)   an application interface layer configured to receive the

20 document from the bit provider and provide the document to an application.

1 16.   The system of claim 15 wherein the application interface layer includes a

2 plurality of interfaces each associated with a respective one of the plurality of

3 applications and configured to provide the document to a respective associated

4 application.

1 17.   A method of representing a physical device as a document, the physical

2 device having an associated property and content information stored in a memory

3 unit situated within the physical device, the method comprising:

4   identifying the physical device as having the associated property;

5   retrieving the content information from the identified physical device; and

6   providing the retrieved content information as at least a portion of the

7   document.

1   18.   The method of claim 17 wherein the physical device is a telephone, and the

2   content information includes a phone number.

1   19.   The method of claim 17 wherein the physical device is a telephone, and the

2   content information includes an address.

1   20.   The method of claim 17 wherein the physical device is a printer, and the

2   content information includes a list of outstanding print jobs.

1   21.   The method of claim 17 wherein the physical device is a camera, and the

2   content information includes image data.

1   22.   The method of claim 17 wherein the physical device is a UNIX machine, and

2   the content information includes status information for the UNIX machine.

1   23.   A system for representing a physical device as a document, the physical

2   device having an associated property and content information stored in a memory

3   unit situated within the physical device, the system comprising:

4   a bit provider configured to:

5   i)   identify the physical device as having the associated property;

6   ii)   retrieve the content information from the identified physical

7   device; and

8   iii)   provide the retrieved content information as at least a portion

9   of the document.

1   24.   The system of claim 23 further comprising:

2   an application interface in communication with the bit provider, the

3   application interface configured to provide the document to an application.

1   25.   The system of claim 24, the bit provider further configured to:

2   iv)   receive additional content information from the application

3   via the application interface; and

4   ii)   send the additional content information to the identified

5   physical device via a communications path.

1   26.   The system of claim 25 wherein the communications path includes a short

2   message service ("SMS") gateway.

1   27.   The system of claim 25 wherein the communications path includes an e-mail

2   gateway.

1   28.   The system of claim 25 wherein the communications path is established, at

2   least in part, over a local area network ("LAN").

1   29.   A method of representing a person as a document using a plurality of data

2   sources, a first one of the data sources having a first associated property and first

3   content information related to the person, a second one of the data sources having

4   a second associated property and second content information related to the person,

5   the method comprising:

6   identifying the first data source as having the first associated property;

7   identifying the second data source as having the second associated property;

8   retrieving the first content information from the first data source and the

9   second content information from the second data source; and

10   combining the retrieved first and second content information to define at

11   least a portion of the document.

1   30.   The method of claim 29 wherein the first data source is an image file and the

2   first content information includes image data.

1   31.   The method of claim 29 wherein the first content information includes an e-

2   mail address.

1   32.   The method of claim 29 wherein the first content information includes a

2   telephone number.

1   33.   The method of claim 29 wherein the first content information includes a list

2   files.

1   34.   A system for representing a person as a document using a data source

2   having an associated property and content information related to the person, the

3   system comprising:

4   a bit provider configured to:

5   i)   identify the data source as having the associated property;

6   ii)   retrieve the content information from the identified data

7   source; and

8   iii)   provide the retrieved content information as at least a portion

9   of the document.

1   35.   The system of claim 34 further comprising:

2   an application interface in communication with the bit provider, the

3   application interface configured to provide the document to an application.

1   36.   The system of claim 35, the bit provider further configured to:

2   iv)   receive additional information from the application via the

3   application interface; and

4   ii)   send the additional information to the person via a

5   communications path.

1   37.   The system of claim 36 wherein the communications path includes a short

2   message service ("SMS") gateway.

1 38. The system of claim 36 wherein the communications path includes an e-mail
2 gateway.

1 39. The system of claim 36 wherein the communications path is established, at
2 least in part, over a local area network ("LAN").

1 40. A method of representing a computational process as a document, the
2 computational process being performed on a computer having a memory unit in
3 which content information related to the computational process is maintained, the
4 method comprising:

5 retrieving the content information from the memory unit of the computer;
6 and

7 providing the retrieved content information as at least a portion of the
8 document.

1 41. The method of claim 40 wherein the computational process includes
2 operation of a Java Remote Method Invocation ("RMI") registry, and the content
3 information includes an object named in the RMI registry.

1 42. The method of claim 40 wherein the computational process includes
2 monitoring of a kernel.

1 43. A system for representing a travel approval process as a document using a
2 data source having an associated property and content information related to the
3 travel approval process, the system comprising:

4   a bit provider configured to:

5   i)   identify the data source as having the associated property;

6   ii)   retrieve the content information from the identified data

7   source; and

8   iii)   provide the retrieved content information as at least a portion

9   of the document.

1   44.   The system of claim 43 further comprising:

2   an application interface in communication with the bit provider, the

3   application interface configured to provide the document to an application.

1   45.   The system of claim 44, the bit provider further configured to:

2   iv)   receive additional information from the application via the

3   application interface; and

4   ii)   store the additional information.

1   46.   A system for representing a hiring process as a document using a data

2   source having an associated property and content information related to the travel

3   approval process, the system comprising:

4   a bit provider configured to:

5   i)   identify the data source as having the associated property;

6   ii)   retrieve the content information from the identified data

7   source; and

8   iii)   provide the retrieved content information as at least a portion

9   of the document.

1   47.   The system of claim 46 further comprising:

2   an application interface in communication with the bit provider, the

3   application interface configured to provide the document to an application.

1   48.   The system of claim 47, the bit provider further configured to:

2   iv)   receive additional information from the application via the

3   application interface; and

4   ii)   store the additional information.

1   49.   The system of claim 48 wherein the communications path includes a short

2   message service ("SMS") gateway.

1   50.   The system of claim 48 wherein the communications path includes an e-mail

2   gateway.

1   51.   The system of claim 48 wherein the communications path is established, at

2   least in part, over a local area network ("LAN").